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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/945,083

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Marcelo de Azevedo

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05/05/2005

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INTELLECTUAL PROPERTY ADMINISTRATION
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EXAMINER

EMDADI, KAMRAN

ART UNIT

PAPER NUMBER

2667

DATE MAILED: 05/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/945,083

Applicant(s)

DE AZEVEDO ET AL.

Examiner

Kamran Emdadi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-16, 30 and 31 is/are allowed.
- 6) ☒ Claim(s) 17, 19, 23 and 29 is/are rejected.
- 7) ☒ Claim(s) 18, 20-22 and 24-28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8-19-02.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17, 19, 23 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Banker et al. (U.S. Patent No. 6,426,947) in view of Oppenheimer et al. (U.S. Patent No. 5,282,270).

Regarding claims 17, 19, 23 and 29 Banker discloses a method for topology discovery that performs automatically to detect changes in topology (see Abstract). Banker teaches broadcasting a discovery probe packet (column 25, lines 25-28), in response to receiving the probe packet the local slave node will transmit a confirmation packet back to the master node 20 (column 26, lines 35-38). In addition, the child will send an acknowledgement packet back to the parent or master node 20 (column 37, lines 35-40). The process also may include a queue for holding the probe packets. Banker is silent, however, regarding a fourth packet operation and with regard to sending a probe from the new node instead of the disclosed operation of having the probe sent from the master node 20.

Oppenheimer discloses a new node sending a packet to be discovered, where a second node transmits a first signal to a router and the first router sends a second signal to other routers in the network and a second router will create a third signal to

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locate a node having the correct alias associated with the original first signal. The node having the correct alias will then create a fourth signal in response to the third signal to the second router. The signaling performed in Oppenheimer is comparatively a four signaling operation that arrives at the result of claims 17, 23 and 29 but lacks the details of a probe signal and acknowledgement signal as described in Banker.

Evidence to combine these two references is disclosed in the Background portions of the respective specifications. For instance, Banker recites the need to manage network configurations efficiently to consolidate bandwidth and network resources (column 1, lines 43-48). Similarly, Oppenheimer describes the need for updated zone information in network nodes to ensure reliability and to provide for dynamic network configurations (column 1, lines 1-10). Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined these two references to arrive at the features recited in claims 17, 23 and 29.

Allowable Subject Matter

Claims 1-16, 30 and 31 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 1, none of the cited references taken individually or in combination, teach or suggest all of the features recited in steps (a)-(k).

Regarding claims 2-16, these claims are allowed by virtue of their dependency on claim 1.

Regarding claim 30 none of the cited references taken individually or in combination, teach or suggest all of the features recited in steps (a)-(h).

Regarding claim 31 none of the cited references taken individually or in combination, teach or suggest all of the features recited in steps (a)-(j).

Claims 18, 20-22 and 24-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of their respective base claims and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter in addition to the limitations recited in the parenting claims the following features are allowable:

Regarding claim 18, step (g) recites features that are novel over the prior art cited to record.

Regarding claims 20-21, the suspending operation includes features that are novel over the prior art cited to record.

Regarding claim 22, the interleaving operation includes features that are novel over the prior art cited to record.

Regarding claim 24, steps (f-g) recites features that are novel over the prior art cited to record.

Regarding claim 25, recites a time period of about one second that is novel over the prior art cited to record.

Regarding claim 26, the current processor with respect to a maximum processor feature is novel over the prior art cited to record.

Regarding claim 27, a time period of 10 seconds between broadcasts is novel over the prior art cited to record.

Regarding claim 28, only processor numbers likely to be present in other nodes from which no discovery initiator packet was received are used in the broadcasting step is novel over the prior art cited to record.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kamran Emdadi whose telephone number is 571-272-6047. The examiner can normally be reached M-F between the hours of 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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Kamran Emdadi

April 25, 2005


CHI PHAM
SUPERVISORY PATENT EXAMINE
TECHNOLOGY CENTER 2800 4/28/05